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	Attorney Docket Number	4239-66168-03
	Application Number	10/561,487
	Filing Date	December 19, 2005
	First Named Inventor	Drayna
	Art Unit	
	Examiner Name	

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
		2002/0048763	04/25/2002	Penn et al.
		2002/0094551	07/18/2002	Adler
		2002/0128433	09/12/2002	Yao et al.
		2002/0143151	10/03/2002	Yao et al.
		2003/0022278	01/30/2003	Zuker et al.
		2003/0143668	07/31/2003	Suwa et al.
		2003/0235833	12/25/2003	Suwa et al.
		5,380,765	01/10/1995	Hirsch
		5,972,621	10/26/1999	Tartaglia et al.
		6,159,700	12/12/2000	Aiyar et al.
		6,383,778	05/07/2002	Zuker et al.
		6,521,747	02/18/2003	Anastasio et al.
		6,540,978	04/01/2003	Margolskee et al.
		6,558,910	05/06/2003	Zuker et al.

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
		CA	2418130	02/03/2003	Japan Science and Technology Corporation

EXAMINER	DATE
SIGNATURE:	CONSIDERED:

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FOREIGN PATENT DOCUMENTS					
Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
		EP	1270724	01/02/2003	National Institute of Advanced Industrial Science and Technology
		WO	99/06830	02/11/1999	The Regents of the University of California
		wo	00/21985	4/20/2000	Genset
		WO	00/38536	07/06/2000	Mount Sinai School of Medicine of New York University
		wo	01/18050	03/15/2001	The Regents of the University of California
		WO	01/66563	09/13/2001	Senomyx, Inc.
		WO	01/77676	10/18/2001	Senomyx, Inc.
		wo	02/068579	09/06/2002	PE Corporation
		WO	02/103005	12/27/2002	National Institute of Advanced Industrial Science and Technology
		wo	02/16548	02/28/2002	Japan Science and Technology Corporation
		WO	02/36622	05/10/2002	Senomyx, Inc.
		wo	03/006482	01/23/2003	Senomyx, Inc.
		WO	03/008627	01/30/2003	The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services
		WO	2004/029087	04/08/2004	Deutsches Institut Für Ernährungsforschung

EXAMINER	DATE
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Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
		Adler et al., "A Novel Family of Mammalian Taste Receptors," Cell 100:693-702 (2000)
		Anne-Spence <i>et al.</i> , "Estimating the Recombination frequency for the PTC-Kell linkage," <i>Hum. Genet.</i> 67:183-186 (1984)
		Bradbury, "Taste Perception: Cracking the code," PLoS Biology 2(3):0295-0297 (2004)
		Bufe <i>et al.</i> , "The human TAS2R16 receptor mediates bitter taste in response to β-glucopyranosides," <i>Nature Genetics</i> 32:397-401 (2002)
		Bufe <i>et al.</i> , "The Molecular Basis of Individual Differences in Phenylthiocarbamide and Propylthiouracil Bitterness Perception," <i>Current Biol.</i> 15:322-327 (2005)
		Bufe, "Dissertation zur Erlangung des Doktorgrades an der Universitat Potsdam: Identifizierung and Charakterisierung von Bitterezeptoren," http://www.pub.ub.uni-potsdam.de/2004/0013/bufe.pdf (May 2003)
		Chandrashekar <i>et al.</i> , "T2Rs Function as Bitter Taste Receptors," <i>Cell</i> 100:703-711, (2000)
		Conte et al., "Identification and characterization of human taste receptor genes belonging to the TAS2R family," Cytogenet. Genome. Res. 98:45-53 (2002)
		Drayna, et al., "Genetic analysis of a complex trait in the Utah Genetic Reference Project: a major locus for PTC taste ability on chromosome 7q and a secondary locus on chromosome 16p," Hum. Genet. 112:567-572 (2003)
		Gillis, "Genetics May Hold Clues to Smell, Taste," Los Angeles Times (June 4, 2001)
		Guo and Reed, "The genetics of phenylthiocarbamide perception," <i>Annals of Human Biology</i> 28(2):111-142 (2001)
		Kim et al., "Genetics of Human Taste Perception," J. Dent. Res. 83(6):448-453 (2004)

	EXAMINER DATE SIGNATURE: CONSIDERED:	DATE
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^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

	1
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Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
		Kim <i>et al.</i> , "Positional Cloning of the Human Quantitative Trait Locus Underlying Taste Sensitivity to Phenylthiocarbamide," <i>Science</i> 299:1221-1225 (2003)
		Kim <i>et al.</i> , "Worldwide Haplotype Diversity and Coding Sequence Variation at Human Bitter Taste Receptor Loci," <i>Human Mutation</i> 26(3):199-204 (2005)
		Lipshutz et al., "High density synthetic oligonucleotide arrays," Nature Genetics Suppl. 21:20-24 (1999)
		Matsunami <i>et al.</i> , "A family of candidate taste receptors in human and mouse," <i>Nature</i> 404:601-604 (2000)
		McLaughlin <i>et al.</i> , "Gustducin is a taste-cell-specific G protein closely related to the transducins," <i>Nature</i> 357:563-569 (1992)
		Miyajima et al., "Expression of murine and human granulocyte-macrophage colony-stimulating factors in S. cerevisiae: mutagenesis of the potential glycosylation sites," EMBO J. 5:1193-1197 (1986)
		Offermanns and Simon, "Gα15 and Gα16 couple a wide variety of receptors to phospholipase C," <i>J. Biol. Chem.</i> 270:15175-15180 (1995)
		Sainz et al., "Identification of a novel member of the T1R family of putative taste receptors," J. Neurochem. 77(3):896-903 (2001)
		Shi et al, "Adaptive Diversification of Bitter Taste Receptor Genes in Mammalian Evolution," Mol. Biol. Evol. 20:805-814 (2003)
		Takeda et al., "Identification of G protein-coupled receptor genes from the human genome sequence," FEBS Letters 520:97-101 (2002)

EXAMINER DATE CONSIDERED:

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Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS	
		Tepper, "Genetics of Perception '98: 6-n-Propylthiouracil: A Genetic Marker for Taste, with Implications for Food Preference and Dietary Habits," Am. J. Hum. Genet. 63:1271-1276 (1998)	
		The Sanger Center, "Toward a complete human genome sequence," <i>Genome Research</i> 8:1097-1108 (1998)	
		Ueda <i>et al.</i> , "Identification of coding single-nucleotide polymorphisms in human taste receptor genes involving bitter tasting," <i>BBRC</i> 285(1):147-151 (2001)	
		Vaidehi <i>et al.</i> , "Prediction of structure and function of G protein-coupled receptors," <i>PNAS</i> 99:12622-12627 (2002)	
		Wang et al., "Relaxation of selective constraint and loss of function in the evolution of human bitter taste receptor genes," Human Molecular Genetics 13(21):2671-2678 (2004)	
		Wooding <i>et al.</i> , "Independent evolution of bitter-taste sensitivity in humans and chimpanzees," <i>Nature</i> 440:930-934 (2006)	
		Wooding et al., "Natural Selection and Molecular Evolution in PTC, a Bitter-Taste Receptor Gene," Am. J. Hum. Genet. 74:637-646 (2004)	
		Wu <i>et al.</i> , "Expression of bitter taste receptors of the T2R family in the gastrointestinal tract and enteroendocrine STC-1 cells," <i>PNAS</i> 99(4):2392-2397 (2002)	
		Zhang et al., "Coding of sweet, bitter, and umami tastes: different receptor cells sharing similar signaling pathways," Cell 112(3):293-301 (2003)	
		Zhao et al., "The receptors for mammalian sweet and umami taste," Cell 115(3):255-266 (2003)	

EXAMINER DATE SIGNATURE: CONS	E SIDERED:
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In re application of: Drayna et al.

Application No. 10/561,487 **Filed:** December 19, 2005 **Confirmation No.** 2289

For: VARIANTS OF HUMAN TASTE

RECEPTOR GENES

Examiner: Art Unit:

Attorney Reference No. 4239-66168-03

TRANSMITTAL LETTER

Submitted herewith for filing in the application referenced above are the following:

✓ Information Disclosure Statement✓ Form 1449 and 48 of the references cited thereon

The Director is hereby authorized to charge any additional fees that may be required, or credit over-payment, to Deposit Account No. 02-4550.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

One World Trade Center, Suite 1600 121 S.W. Salmon Street

Portland, Oregon 97204

Telephone: (503) 595-5300 Facsimile: (503) 595-5301

By /Tanya M. Harding/

Tanya M. Harding, Ph.D. Registration No. 42,630

cc: Docketing